Technical Data Sheet

Purified Mouse Anti-Human CD335 (NKp46)

Product Information

 Material Number:
 557911

 Size:
 0.1 mg

 Concentration:
 0.5 mg/ml

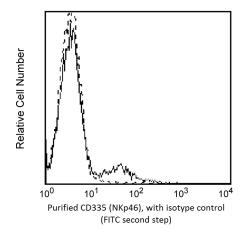
 Clone:
 9E2/Nkp46

Isotype:Mouse (BALB/c) IgG1, κ Reactivity:QC Testing: Human

Storage Buffer: Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 9E2/Nkp46 monoclonal antibody specifically binds to CD335. CD335 is also known as the Natural killer cell p46-related protein (NKp46) and the Natural cytotoxicity triggering receptor 1 (NCR1). CD335 is a 46 kDa type I membrane glycoprotein that is expressed on resting and activated NK cells. Its extracellular region contains two C2-type, Ig-like domains. The transmembrane domain contains a positively charged amino acid (Arg) which could be involved in stabilizing the association with CD3 ζ . Its intracellular region does not contain immunoreceptor tyrosine-based activating motifs (ITAM), but it is linked to intracytoplasmic transduction machinery by its association with CD3 ζ and Fc ϵ RI γ adaptor proteins. CD335 along with NKp30 and NKp44 are referred to as natural cytotoxicity receptors (NCR). These receptors play very important roles in cells that kill virus-infected target cells, tumor cells and MHC-class I-unprotected cells.



Profile of CD335 (NKp46) reactivity on peripheral blood lymphocytes analyzed by flow cytometry. Second step staining with Cat. No. 555988.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Flow cytometry Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone	
555746	Purified Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21	
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal	

BD Biosciences

bdbiosciences.com

United States Canada Europe Japan Asia Pacific Latin America/Caribbear 877.232.8995 800.979.9408 32.53.720.550 0120.8555.90 65.6861.0633 55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be constructed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be help responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is stictly prohibited. For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD



557911 Rev. 4 Page 1 of 2

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. An isotype control should be used at the same concentration as the antibody of interest.
- 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Mandelboim O, Porgador A. NKp46. Int J Biochem Cell Biol. 2001; 33(12):1147-1150. (Biology)

Nakajima H, Cella M, Bouchon A, et al. Patients with X-linked lymphoproliferative disease have a defect in 2B4 receptor-mediated NK cell cytotoxicity. Eur J Immunol. 2000; 30(11):3309-3318. (Biology)

Sivori S, Pende D, Bottino C, et al. NKp46 is the major triggering receptor involved in the natural cytotoxicity of fresh or cultured human NK cells. Correlation between surface density of NKp46 and natural cytotoxicity against autologous, allogeneic or xenogeneic target cells. *Eur J Immunol.* 1999; 29(5):1656-1666. (Biology)

Sivori S, Vitale M, Morelli L, et al. p46, a novel natural killer cell-specific surface molecule that mediates cell activation. *J Exp Med.* 1997; 186(7):1129-1136. (Biology)

BD Biosciences

bdbiosciences.com

 United States
 Canada
 Europe
 Japan
 Asia Pacific
 Latin America/Caribbean

 877.232.8995
 800.979.9408
 32.53.720.550
 0120.8555.90
 65.6861.0633
 55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be constructed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be help responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is stictly prohibited. For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD



557911 Rev. 4 Page 2 of 2